

STUDENTS' BEHAVIOUR PROBLEMS: AN ATTEMPT TO UNDERSTAND THE CAUSES

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ABSTRACT: A path analysis study was carried out to examine the effects of students' self-concept and other background variables of family environment, family socio-economic status and students' intelligence on their behaviour problems. Seven hundred and twenty-three form three students were randomly selected for the study based on their background variables mentioned above. The result shows that students' academic and non-academic self-concept were significantly correlated with their behaviour problems. The non-academic self-concept was a better predictor of behaviour problems as compared to the academic self-concept. However, students' intelligence was found to be the best predictor of their behaviour problems among the independent variables under study. The role of intelligence and students family environment was also important as they have an indirect effect on their behaviour problems through the non-academic self-concept. The results of the study have important implications on the role of parents, educators and administrators in checking student behaviour problems.

INTRODUCTION

Educators, school administrators, and parents should not take problems of misbehaviour among students lightly. If these problems are not addressed, there is a tendency that it will be out of control and disrupt learning activities. Various studies (Chng, 1976; Purkey, 1978; Madden, 1988) have shown that there is a positive relationship between students' self-concept and their behaviour problems.

Generally the observable relationships between self-concept and behaviour problems were provided mainly through correlation studies. However, correlation studies alone will not help

much in determining other factors associated with such relationship. Many researchers felt that there is a necessity in studying a cause and effect relationship between self-concept and behaviour problems in relation to specific background factors. In this regard, Hansford and Hattie (1982), Shavelson and Bolus (1982) and Eshel and Kurman (1991) suggested that certain background factors such as family environment, family socio-economic status and intelligence could influence one's self-concept. They believed that any cause and effect studies regarding the relationship between self-concept and behaviour problems should take into consideration these background factors, as they are considered vital in the formation of self-concept.

Family members, especially parents are believed to be the principal agent of socialisation for children. As the head of the family, parents are the architects of family environments and they are always regarded as the best model that the children have. As Burns (1982) put it, children are assumed to internalise as their world the world of their family members. Thus the nature of the relationship among family members plays an important role in moulding the children's self-concept.

Contrary to the importance of family environment in the formation of one's self-concept, it is always argued that family socio-economic status has no effect on the self-concept of children (Rosenberg, 1978). Studies on the relationship between socio-economic status and self-concept has also been largely ignored (Demo, 1979). Being one of the macro-structural variable, the researcher shares the opinion of Franks and Marolla (1976) that socio-economic status is deemed significant for research aimed at gaining a better understanding of its effect on self-concept.

In stressing the importance of intelligence on behaviour problems, Al-Ghazaly (Hamid, 1990) believed that it is an important tool not only in acquiring knowledge but also in assessing or evaluating oneself. This views is shared by Simon (1978) who believed that one's intelligence will determine his thinking and his behaviour.

The above-mentioned reviews formed the basis of the current research. It was hypothesized that students' academic and non-academic self-concept affect their behaviour problems. Students' self-concept is in turn affected by the background factors of their intelligence, family environment and parents socio-economic status, such that they have an indirect as well as direct effect on behaviour problems.

RESEARCH HYPOTHESES

In exploring the relationship between students' self-concept and certain background factors and their behaviour problems as well as to see the causal relationship among these variables, the following hypotheses were then proposed:

1. There would be a significant relationship between academic and non-academic self-concept with students' behaviour problems.
2. The non-academic self-concept would be a better predictor of behaviour problems than the academic self-concept.
3. Students' background factors of family environment, socio-economic status and intelligence would serve as better predictors of behaviour problems than their self-concept.
4. Students' family environment, socio-economic status and intelligence would have direct and indirect effects on their self-concept and behaviour problems.

RESEARCH METHODOLOGY

Sample

The sample of the present study consisted of 723 Form III students from 10 secondary schools randomly selected from a total of 23 schools in the district of Johor Bahru, Johor. Four of the schools were located in inner city and the other six were in suburban areas. The students were selected by means of stratified random sampling based on their intelligence, family environment, and parents' socio-economic status.

Collection of Data

The principal technique employed for data gathering was questionnaires. Data for this study was collected in three phases. This was done to satisfy the requirements needed to examine the cause and effect relationships among the variables under study (Pedhazur, 1982).

In the first phase, a total of 2,814 students from 10 selected schools were given the Family Environment Scale (Moos, 1975), Questionnaires on Parents' Socio-economic Status (Othman, 1994) and Culture Fair Intelligence Test (Cattell, 1973) to assess their family environment level, parents socio-economic status and intelligence respectively. Based on the combination of the various levels of background factors, 723 students were selected to participate further in the study. In the second phase, data on the academic and non-academic self-concept were collected by administering the Academic Self-Concept Scale (Dolan & Enos, 1980) and the Tennessee Self-Concept Scale (Fitts, 1965). The third phase involved the collection of data on students' behaviour problems, by administering the Students Behaviour Problem Checklist (Othman, 1994). The time period that separates each phase of data collection was about eight months.

Instruments

Four sets of instrument were used in this study:

(a) Tennessee Self-Concept Scale:

The Tennessee Self-Concept Scale (TSCS) was used to assess the non-academic self-concept of the students in this study. TSCS consists of self-descriptive statements to which the students respond on a 5-point scale ranging from 'completely true' to 'completely false'. The TSCS consists of eight sub-scales namely Personal, Identity, Self-satisfaction, Behaviour, Physical Self, Moral-Ethical Self, Family Self and Social Self. The scores on the eight subscales were added together to obtain the total score (P score) which was used as a summary measure of the students' self-concept.

The reliability coefficient for the total score is 0.88 and the reliability coefficient for the various subscales score is in the range of 0.88 - 0.90 (Fitts, 1965). The scale was translated into Bahasa Melayu as it is the medium of instruction in all government secondary schools in Malaysia. The translated version was reported to have a test re-test reliability of 0.87 for the total score (Othman, 1994).

(b) The Academic Self-Concept Scale:

The Academic Self-Concept Scale (ASCS) (Dolan & Enos, 1980) consists of 17 items. It was used to assess students confidence, ability, anxiety, concentration, satisfaction and the feeling of being appreciated in their academic endeavours. The translated version of the scale has a test re-test reliability of 0.86 (Othman, 1994).

(c) The Culture Fair Intelligence Test:

The students' level of intelligence was measured by The Culture Fair Intelligence Test (CFIT) Form - 3 A. The test which was developed by Cattell (1973) measures individual intelligence in a manner designed to reduce verbal fluency, cultural climate and educational level. It is a non-verbal test that requires examinees to perceive relationships in shapes and figures. The test consists of four subtests namely Progressive Series, Classification, Matrices and Conditions. The test has a split half reliability of 0.74 and a test re-test reliability of 0.69 (Cattell, 1973).

(d) The Behaviour Problem Checklist:

The Behaviour Problem Checklist consists of 45 items negatively worded to indicate common behaviour problems among students in lower secondary schools. The items are classified into 7 factors namely aggressiveness, lack of concentration, immaturity, acts of crime, mild

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disciplinary problems, withdrawal and relationship problems with peer group. It has a test re-test reliability of 0.95 (Othman, 1994)

RESULTS

Pearson product moment correlation coefficients were computed between scores on the academic and non-academic self-concept and scores on behaviour problems. The correlation index is presented in Table 1.

TABLE 1: PEARSON CORRELATION INDEX BETWEEN THE ACADEMIC AND NON-ACADEMIC SELF-CONCEPT AND BEHAVIOUR PROBLEMS

Self-concept	Behaviour Problems
<u>Academic Self-concept</u>	
Total Score	-0.13**
Sub-scale score:	
Anxiety and Concentration	-0.12 **
Confidence	-0.01
Ability	-0.06
Satisfaction	-0.12 **
Appreciated	-0.03
<u>Non- academic Self-Concept</u>	
Total Score	-0.18**
Sub-scale score:	
Physical	-0.16**
Moral-Ethical	-0.12**
Personal	-0.14**
Family	-0.18**
Social	-0.08
Behaviour	-0.18**
Satisfaction	-0.12*
Identity	-0.15**
* $p < 0.01$	
** $p < 0.001$	

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The result indicates that both the academic and non-academic self-concept correlated significantly with students' behaviour problems. Thus, the first hypothesis that the academic and the non-academic self-concept were significantly correlated with students' behaviour problems was accepted. As in other studies (Chiam, 1976; Hanford & Hattie, 1982; Marsh, 1984) the correlation were low and the value of the correlation between the non-academic self-concept and behaviour problems ($r = -0.18$) was higher than the value of the correlation between the academic self-concept and behaviour problems ($r = -0.13$).

The study also supported the second hypothesis that non-academic self-concept is a better predictor of behaviour problems than the academic self-concept. Table 2 shows that the standardized beta for non-academic self-concept when regressed on behaviour problems is -0.15 where as the standardized beta for academic self-concept is -0.07 .

TABLE 2: REGRESSION ANALYSIS PREDICTING BEHAVIOUR PROBLEMS FROM STUDENTS ACADEMIC AND NON-ACADEMIC SELF-CONCEPTS

	Std. Beta	t	p
Academic self-concept	-0.07	-1.73	0.085
Non-academic self-concept	-0.15	-3.85	0.000
R Squared = 0.190 Adjusted R Squared = 0.034			
F Value = 13.516 $df = 2, 720$ $p < 0.00$			

In determining whether students' background variables of intelligence, family environment and parents' socio-economic were better predictors of behaviour problems than the academic and non-academic self-concept, it was found that students' intelligence was the only significant predictor ($\beta = -0.20$). However, the non-academic self-concept ($\beta = -0.13$) (Table 3) was the second best predictor of students behaviour problems after their intelligence. The role of socio-economic status, family environment and the academic self-concept as predictors of students behaviour problems was not significant. Thus the third hypothesis was not accepted.

In examining hypothesis 4, a path analysis model was devised to determine the causal effect of the three background variables of family environment, socio-economic status and intelligence as well as the academic and the non-academic self-concept on behaviour problems. A hierarchical regression analysis was used to determine the beta coefficient (β) and the values are shown in Table 4. Accordingly, the direct, indirect and total effect of these variables on behaviour

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problems are shown in Table 5 and in Figure 1. Thus a causal model of the students' behaviour problems based on the significant effects of the variables under study is formulated as shown in Figure 2.

TABLE 3: REGRESSION ANALYSIS PREDICTING BEHAVIOUR PROBLEMS FROM STUDENTS SELF-CONCEPTS AND BACKGROUND FACTORS

	Std. Beta	t	p
Predictor Variables:			
Intelligence	-0.20	-5.55	0.001
Non-academic Self-concept	-0.13	-3.11	0.002
Socio-economic Status	-0.05	-1.46	0.145
Academic Self-concept	-0.04	-0.99	0.322
Family Environment	-0.01	-0.32	0.748
<div> <div>R Squared = 0.29</div> <div>F Value = 13.075</div> </div> <div> <div>Adjusted R Squared = 0.08</div> <div>df = 5, 717 p < 0.001</div> </div>			

It was found that the effect of students' non-academic self-concept on students behaviour problems is higher than the academic self-concept. The non-academic self-concept has significant direct effect on students behaviour problems ($\beta = -0.13$) where as the direct effect of academic self-concept was not significant ($\beta = -0.04$) (Table 5).

Students' intelligence has both direct and indirect effects on their behaviour problems. The direct effect is more pronounced ($\beta = -0.20$) and it is equivalent to 93.9% of effects originating from students' intelligence. However, the indirect effect of intelligence through the non-academic self-concept is small ($\beta = -0.009$; 4.2%). Its' indirect effect through the academic self-concept is also negligible (Table 5)

TABLE 4: STANDARDISED BETA COEFFICIENT (β) FOR EACH HIERARCHY OF PATH ANALYSIS ON BEHAVIOUR PROBLEMS

Independent Variables	Dependent Variables and Beta Values		
	<u>NASC</u> 1*	<u>ASC</u> 2 *	<u>BP</u> 3 *
Family Environment	0.43	0.13	- 0.01 (NS)
Socio-economic Status	0.01 (NS)	0.03 (NS)	- 0.05 (NS)
Intelligence	0.07	0.09	-0.20
Non-academic self-concept	-	0.32	- 0.13
Academic Self-concept	-	-	- 0.04 (NS)

* Stage of Regression Analysis

NASC = Non-Acadernic self-concept

SAC = Academic Self-concept

BP = Behaviour Problems

NS = Not Significant

This study also found that students' family environment has an indirect effect on their behaviour problems through their non-academic self-concept (Table 5). Its' effect ($\beta = -0.056$) represents 78.9% of the total effect originating from family environment. The remainder of the percentage is accumulated from its direct effect and indirect effect through the students' academic self-concept and is not significant.

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TABLE 5: DIRECT, INDIRECT AND TOTAL EFFECTS OF BACKGROUND FACTORS AND SELF-CONCEPTS ON BEHAVIOUR PROBLEMS

Independent Variables	Direct effect	<u>Indirect Effect Through</u>		<u>Total Effect on</u>
		NASC	ASC	BP
FE**	- 0.01* (14.1%)	- 0.056 (0.43 X - 0.13) (78.9%)	- 0.005* (0.13 X - 0.04) (7.0%)	- 0.071 (100%)
SES	- 0.05* (96.2%)	- 0.001* (0.01 X - 0.13) (1.9%)	- 0.001* (0.03 X - 0.04) (1.9%)	-0.052 (100%)
IQ	- 0.20 (93.9%)	- 0.009 (0.07 X - 0.13)	- 0.004* (0.09 X - 0.04) (4.2%)	-0.213 (100%) (1.9%)
NASC	- 0.13 (90.9%)	-	- 0.013* (0.32 X - 0.04)	-0.143 (100%)
ASC	- 0.04* (1 00%)	-	-	- 0.04 (1 00%)

* Not Significant

** Variables:

FE = Family Environment
SES = Socio-economic Status
ASC = Academic Self-concept

IQ = Intelligence
NASC = Non-academic Self-concept
BP = Behaviour Problems

The effects of family socio-economic status on students behaviour problems were small. Both direct and indirect effects through the academic and non-academic self-concept were not significant. Therefore, it was concluded that the non-academic self-concept and intelligence

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have direct effect on students' behaviour problems , where as intelligence and family environment had indirect effect on behaviour problems through the non-academic self-concept. Thus, hypothesis 4 is not accepted.

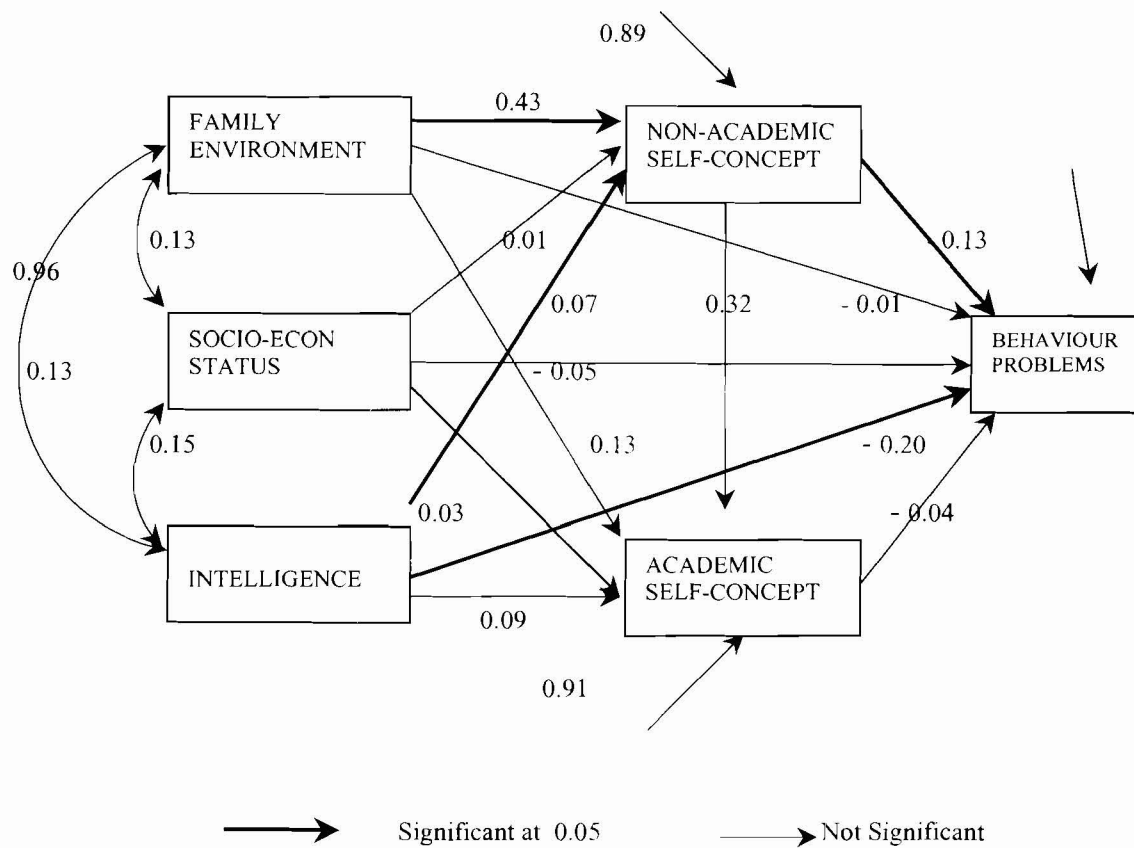


Figure 1: Path Analysis Showing the Relationship Between Students' Self-concept, Background Variables and their Behaviour Problems

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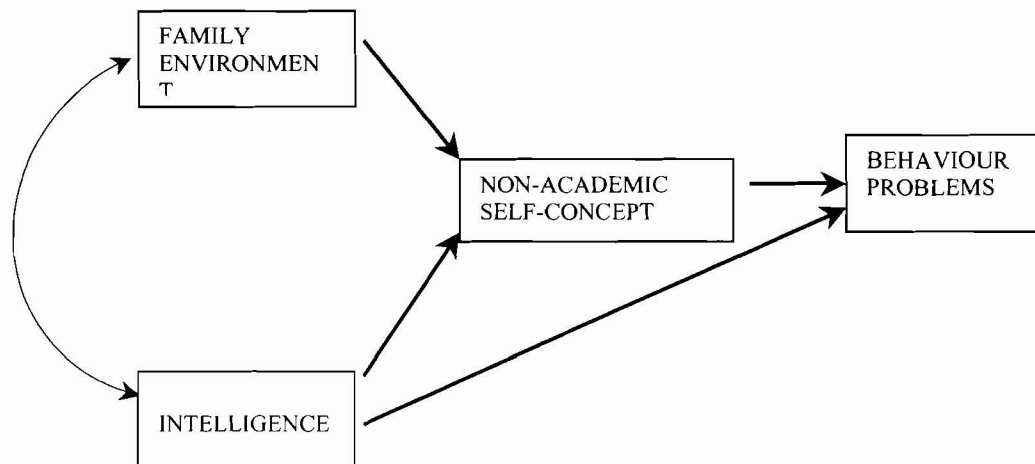


Figure 2: Causal Model for Students Behaviour Problems

DISCUSSION

The correlation found between the academic and the non-academic self-concept and behaviour problems was low. The correlation between the academic self-concept and behaviour problems was -0.13 and the correlation between the non-academic self-concept and behaviour problems was -0.18. This indicates that the variances explained by the academic and the non-academic self-concept on behaviour problems were small, i.e. 2% and 3% respectively. However, this study also shows that the non-academic self-concept is a better predictor of behaviour problems as compared to the academic self-concept.

Intelligence was found to be the best predictor for behaviour problems among students' background factors and their self-concept. This was followed by students' non-academic self-concept. The role of intelligence is two prong; one is its direct effect and the other is its indirect effect through the students' non-academic self-concept. The students' non-academic self-concept only has a direct effect on behaviour problems. Its' effect through the academic self-concept was small and not significant. Family environment does not seem to have much direct effect on students' behaviour problems. However, it has an indirect effect through the students' non-academic self-concept. The effects of parents' socio-economic status on students' behaviour problems were small and insignificant.

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The role played by intelligence and family environment on students' behaviour problems shows that background factors are vital in maintaining their good behaviour. It has been shown that students who are good in their studies do not create disciplinary and other behavioural problems in and outside the classroom. Accordingly, students who have positive family environments are less susceptible to behaviour problems.

It was also shown in this study that positive family environment will enhance the formation of positive non-academic self-concept which in turn will bring about good behaviour. However, students who are from high socio-economic status are not necessarily well behaved as there is a tendency that these students lack parental love and guidance. This is particularly true especially when both parents are working and their duty of raising the children is subjected to the whims and fancies of their maids.

CONCLUSION

Any attempt to trace the roots of students' behaviour problems will not be successful unless a very comprehensive research is undertaken to examine other possible variables. It is therefore suggested that multiple criteria be used to determine the causes of students' behaviour problems. In addition, research of a qualitative and longitudinal nature is necessary to determine the relative contribution of the variables studied.

This study has important implications for parents and teachers. They should play a more effective role in creating environments where self-worth is a valued attribute. Parents should recognise the need for creating a positive family environment as it would help in promoting a higher positive self-concept among their children, and teachers should help their students to develop socio-cultural and personal experiences as well as using their mental abilities in different situational demands. These valuable experiences will enhance their ability to handle life intelligently as a matured and well-rounded person.

REFERENCES

- Burns, R. B. (1982). *Self-concept Development and Education*. London: Holt, Rinehart & Winston.
- Cattell, R. B. (1973). *Measuring Intelligence With the Culture Fair Test*. Los Angeles, C.A.: Western Psychological Services.

STUDENTS' BEHAVIOUR PROBLEMS: AN ATTEMPT TO UNDERSTAND THE CAUSES

- Chiam, H. K. (1976). *A Study of the Self-concept of Form 4 Students in an Urban Area and Some of Its Correlates*. Unpublished PhD Thesis, University of Malaya.
- Chng, C. L. (1976). The Inadequate Home: A Breeding Ground for Delinquents. *Jurnal Pendidikan*, 4, 60-65.
- Demo, D. H. (1979). *Social Class and Self-esteem Among Pre-adolescents*. Unpublished M.A. thesis, Virginia Commonwealth University.
- Dolan, L. J. & Enos, M. M. (1980). *School Attitude Measure*. Glenview: Scott, Foresman Test Division.
- Eshel Y. & Kurman, J. (1991). Academic Self-concept, Accuracy of Perceived Ability and Academic Attainment. *British Journal of Educational Psychology*, 61, 187-196.
- Fitts, W. H. (1965). *Tennessee Self-concept Scale*. Nashville, Tennessee: Nashville Mental Hospital Center.
- Franks, D. D. & Marolla, J. A. (1976). Efficacious and social approval as interacting dimensions of self-esteem: A tentative formulation through construct validation. *Sociometry*, 9: 32-41.
- Hamid Fahmy Zarkasyi (1990). *Pemikiran Al-Ghazali Tentang Pendidikan*. Setapak, Kuala Lumpur: Harian (Zulfadzli) Sdn. Bhd.
- Hansford, B. C. & Hattie, J. A. (1982). The relationship between self and Achievement /performance measures. *Review of Educational Research*, 52, 123-142.
- Keating, D. (1978). A Search for Social Intelligence. *Journal of Educational Psychology*, 70(2), 218-223.
- Larned, D. T. & Muller, D. (1979). Development of Self-concept in Grades 1 thru 9. *Journal of Psychology*, 102, 143-148.
- Madden, L. L. (1988). *A Study of Student Self-concept and Selected Variables*. Unpublished PhD Thesis, University of Wyoming.
- Othman Md. Johan (1994). *Kesan Konsep Kendiri Terhadap Tingkah Laku Murid-Murid*. Tesis PhD yang tidak diterbitkan, Universiti Kebangsaan Malaysia.
- Purkey, W. W. (1978). *Inviting School Success*. Belmont: Wadsworth.

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Rosenberg, M. (1978). Social Class and Self-esteem Among Children and Adults. *American Journal of Sociology*, 84 (1), 53-77.

Shavelson, R. J. & Bolus, R. (1982). Self-concept: The Interplay of Theory and Method. *Journal of Educational Psychology*, 74 (1), 3-17.